CORE DESCRIPTION
ST-1-473
515.0' - 522.0'
(65% recovery, RQD = 5%; very poor rock quality)

Alluvium (Santa Fe Group): Gravel to cobble conglomerate, unstratified; moderately to well cemented, poorly sorted, polygenetic, individual clasts are subrounded to angular and range from <1/32" to 2.8" (<1mm to 7cm in diameter. Lithologies include (in decreasing abundance): Andesite (10 Y 6/2 pale olvive to 5 RP 4/2 greyish red purple), rhyolite (5 Y 8/4 greyish yellow to 10 Y 8/2 pale greenish yellow), micritic limestone (N3 dark grey to N4 medium dark grey), siltstone (10 R 3/4 dark reddish brown), granite (5 R 5/4 moderate red to 5 R 4/6 moderate red), and possibly quartzite (10 Y 8/2 pale greenish yellow). No sedimentary structures or fractures are present within this conglomerate core sample. Cementing mineral is calcium carbonate ($CaCO_3$) (effervesces with HCL). Estimated grain size distribution (by volume): gravel (65%), sand (25%), silt (5-10%), and clay (<5%).

The conglomerate has a visual primary porosity of approximately 15-20%. Groundwater is transmitted through the matrix of this unit due to uncompleted precipitation of calcium carbonate ($CaCO_3$) cement in void spaces. Secondary porosity may also occur within this unit due to its well cemented fabric, however, no discrete fractures are present in the core.